Appl. No. 09/839,044
Reply to the Office Action filed: November 17, 2008
RCE In lieu of Appeal Brief due on August 17, 2008, with extensions

## REMARKS

In lieu of filing an appeal brief, Applicant hereby submits the claim amendments above and the following remarks, in view of which, reconsideration is requested.

After entry of the foregoing amendments, claims 1-3, 5-10, 12-14 and 17-22 remain in this application, of which claims 1 and 8 are independent. No fee is believed due for claims for this amendment.

## Rejection Under 35 U.S.C. §102

Claims 1, 2, 8, 9 and 17-20, of which claims 1 and 8 are independent, were rejected under 35 U.S.C. § 102(c) as anticipated by U.S. Patent No. 6,246,961 to Sasaki et al. (Sasaki). This rejection is respectfully traversed.

As a preliminary matter, independent claims 1 and 8 have been amended to clarify that the estimate of motion is used in the processing of at least one of the two input images to provide an output image that includes a motion-based effect. Support for these limitations is found on page 4, second paragraph, of the specification. Sasaki does not compute any estimate of motion for the purpose of generating an output image that includes a motion-based effect. Instead, the estimates of motion in Sasaki are used solely for the purpose of determining if and when a collision may occur between a moving vehicle and another object.

Applicant notes that the rejections of dependent claims 4 and 11 (which recited "processing the input images according to the estimate of motion") also relied upon U.S. Patent 4,924,310 ("Von Brandt"). The Office Action, with respect to claims 4 and 11 stated that Von Brandt describes using an estimate of motion to interpolate between to image for the purpose of reconstructing missing image frames.

The subject matter of claims 1 and 8 is neither described by nor rendered obvious by Sasaki or Von Brandt, whether taken alone or in combination. Sasaki describes computing motion between corresponding horizontal edges between two images for the purpose of determining whether an object might be rapidly approaching a moving vehicle, and to signal an alarm about the potential collision. Only motion between corresponding horizontal edges is computed. There is no evidence in the record to support a finding that one of ordinary skill in

Appl. No. 09/839,044
Reply to the Office Action filed: November 17, 2008
RCE In lieu of Appeal Brief due on August 17, 2008, with extensions

the art would modify Sasaki in any manner to generate additional image frames from the computed motion. Furthermore, there is no evidence in the record to support a finding that one of ordinary skill in the art would use, for the purpose of reconstructing missing image frames, the computed motions of horizontal edges as described in Sasaki (which Sasaki uses for collision detection).

In making the foregoing amendments, previous amendments to add a "gradient-based" method or a "constraint" have been removed and placed in dependent claims 17 and 18. Support for such amendments is found on page 4, first paragraph, of the specification. The previously added limitations are unnecessary in view of the current amendments. Applicant believes that the current amendments also would still overcome prior rejections made in prior office actions based on other art.

Accordingly, the subject matter of claims 1 and 8 as amended is not described by Sasaki and the rejection should be withdrawn. The remaining claims are dependent claims, the rejections of which should also be withdrawn for at least the same reasons.

Additionally, regarding dependent claims 19 and 20, the technique in Sasaki does not produce, for each pixel in an image, a vector that describes the motion for the pixel from one image to the next. Sasaki only produces a single vector component in one direction for each pair of corresponding edges that is detected, perpendicular to the edges. Accordingly, dependent claims 19 and 20 further distinguish the invention from Sasaki. The Office Action did not address this argument from Applicant's prior Reply.

## Rejections Under 35 U.S.C. §103

Dependent claims 4-6 and 11-13 were rejected under 35 U.S.C. §103 in view of Sasaki and U.S. Patent 4,924,310 ("Von Brandt").

Claims 4 and 11 have been cancelled and claims 5-6 and 12-13 have been amended to be dependent on claims 1 and 8. These rejections are respectfully traversed as claims 5-6 and 12-13 are allowable for at least the same reasons as the claims from which they depend.

Appl. No. 09/839,044
Reply to the Office Action filed: November 17, 2008
RCE In lieu of Appeal Brief due on August 17, 2008, with extensions

Dependent claims 3 and 10 were rejected under 35 U.S.C. §103 in view of Sasaki and U.S. Patent Publication 2002/0159749A1 ("Kobilansky").

These rejections are respectfully traversed as claims 3 and 10 are allowable for at least the same reasons as the claims from which they depend.

These claims have been amended to include limitations similar to claims 7 and 14, which were indicated as including allowable subject matter.

## Conclusion

In view of the foregoing amendments and remarks, the outstanding rejections should be withdrawn. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to Deposit Account No. 50-0876.

Respectfully submitted.

Avid Technology, Inc.

Peter J. Gordon

Registration No. 35,164

Fish & Richardson P.C.

225 Franklin Street

Boston, MA 02110 Tel.: (617) 542-5070